BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF CASCADE POLE COMPANY, Appellant, v. STATE OF WASHINGTON DEPARTMENT OF ECOLOGY, Respondent.	PCHB No. 86-105 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

This matter, the appeal of a regulatory order issued by the Washington State Department of Ecology under RCW 90.48.120 for alleged water pollution, came on for hearing before the Pollution Control Hearings Board; Lawrence J. Faulk, Chairman and Wick Dufford, Member, convened at Lacey, Washington, on October 8, and 9, 1986. Administrative Appeals Judge, William A. Harrison presided. Respondent elected a formal hearing pursuant to RCW 43.21(B).230.

Appellant appeared by Lynda L. Brothers and William D. Maer, Attorneys at Law. Respondent appeared by Jay J. Manning, Assistant

Attorney General. Eugene Barker and Associates provided court reporting services.

Witnesses were sworn and testified. Exhibits were examined. Pre-Hearing and Post-Hearing briefs were accepted. From testimony heard and exhibits examined, the Pollution Control Hearings Board makes these

FINDINGS OF FACT

I

This matter arises at the Olympia facility of appellant, Cascade Pole Company ("Cascade"). The facility is located on ten acres at the tip of the Port of Olympia Peninsula which juts into Budd Inlet.

II

The Port of Olympia Peninsula is comprised entirely of fill. The site of Cascade's facility was filled in the 1930's. The facility was established there in 1939 for the purpose of treating wooden poles to resist rot. Cascade did not establish the facility but took control of it in 1957. Cascade has, since then, pressure treated wooden poles with either creosote or a 5 percent pentachlorophenol solution in medium aromatic oil. The treated poles are sold for use as utility poles or for other commercial purposes.

III

In January, 1983, during excavation of a ditch to hold the sewer line serving the East Bay Marina, workers discovered an oily substance seeping into the ditch near the Cascade facility. The respondent,

Washington State Department of Ecology ("DOE") was notified. That incident began a dialogue between DOE and Cascade concerning possible contamination by Cascade of the soils and groundwater. The dialogue resulted in agreement that Cascade would investigate the problem and report to DOE. Towards this end, Cascade submitted a "Remedial Investigation" work plan (Cascade's choice of terminology). DOE reviewed the plan and approved it with certain changes detailed in a letter dated April 19, 1985. The Remedial Investigation was to be followed by a "Feasibility Study" (also Cascades"s terminology) to be filed with DOE by March, 1986. The terms "Remedial Investigation" and "Feasibility Study" are used in federal law. See The Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") 42 USC Sec. 9601 et seq and the National Contingency Plan, 40 CFR Part 300.

IV

At the due date, Cascade notified DOE by letter of March 31, 1986, that neither the Remedial Investigation nor the Feasibility Study were complete. Based upon increasing concerns from sampling of its own, DOE believed it appropriate to memorialize its request for site investigation in a formal regulatory order. Thus, on May 20, 1986, DOE issued its Order DE 86-520 which cited groundwater contamination. The Order reiterated DOE's request that Cascade perform the Remedial Investigation and Feasibility Study as those had come to be understood

in discussions between DOE and Cascade over the previous three years. The Order also required sampling of the intertidal zone of East Bay out of concern arising from DOE investigation in that area. Appellant has appealed that DOE Order DE 86-520 to this Board by notice of appeal filed June 25, 1986.

V

Cascade had filed its document, entitled Volume I, Remedial Investigation, with DOE under date of May 11, 1986, prior to issuance of the appealed Order.

VI

The fill which makes up the Port of Olympia peninsula rests upon a silt and clay layer. Above this layer, within the fill, there is groundwater known as the "upper" aquifer. Below the silt and clay layer, within a sandy deposit, there is groundwater known as the "lower" aquifer. The silt and clay layer operates as a barrier which prevents interchange of waters between the upper and lower aquifers.

VII

Despite its insulation from the lower aquifer, the upper aquifer is in hydraulic continuity with Budd Inlet. There is interchange between the waters of the upper aquifer and Budd Inlet to such an extent that the level of groundwater in the upper aquifer is influenced by tidal action. Moreover, the waters of the upper aquifer are saline.

VIII

At least since 1983, both Cascade and DOE have sampled groundwater in the upper aquifer beneath the Cascade site. Each has found, from laboratory analysis, that the groundwater is contaminated with both polynuclear aromatic hydrocarbons ("PNA") and pentachlorophenol ("PCP").

Although DOE has not adopted numerical water quality standards for groundwater, a sense of perspective can be gained from looking at numerical water quality standards for surface water. For surface waters such as the Budd Inlet, deleterious material concentrations shall not adversely affect public health or cause toxic conditions to aquatic biota, WAC 173-201-045(3)(c)(vii). The DOE has quantified these values by adopting numbers developed by the United States Environmental Protection Agency. WAC 173-201-035(12). Thus, the numerical limits in the Budd Inlet would be, in parts per billion:

	Public Health	Aquatic Biota
PNA	0	300
PCP	1,010	53

IX

On February 13, 1985, DOE collected samples from two test wells located in the upper aquifer on the Cascade site. The data was as follows in parts per billion:

	Well N-4	Well N-28
PNA	5000	21,000
PCP	92	1,900

These data, as well as the black color and oily odor exhibited by these and other samples establish that the upper aquifer below the Cascade site is severely contaminated.

X

Creosote is composed largely of PNAs. Both creosote and pentachlorophenol (PCP) solution in oil have been used extensively by Cascade at the pressure chambers and nearby storage tanks which are localized on the east side of the 10 acre site. Prior to 1967 the use of creosote predominated while after 1967 the use of PCP solution predominated though both were within the term of appellant's control.

XI

There have been a multiplicity of samples taken of both the soil and groundwater at the Cascade site. These reveal a pattern both for PNAs and PCP and for both soil and groundwater in which very high concentrations are found at the locale of Cascade's pressure chambers and storage tanks with concentrations diminishing in all directions away from those chambers and tanks.

XII

Directly beneath the Cascade pressure chambers and tanks there is an underground pool of oil. This lies about five feet underground and is approximately 100 feet x 300 feet (on the same axis as Cascades chambers and tanks) and about 2 feet deep. The pool rests upon the capillary fringe of the groundwater, and thus is in continuity with the groundwater. Although PNA and PCP contamination in both soil

and groundwater occur beyond the limits of this oil pool, the pool represents the most localized contamination. There is no other known source for this contamination. This pool is comprised of oil like that used by Cascade as a medium for its 5% PCP treatment solution. Both the location and composition of the pool establish that it is the result of escapement of the PCP solution in oil from Cascade's operation into the soil and groundwater. 1)

XIII

Although saline, and unfit for domestic uses, the groundwater of the upper aquifer, were it not contaminated, could have shown at least the potential for commercial or industrial uses such as washing or cooling. This is not so, however, in its present state of contamination.

XIV

There is a migration of both PNA and phenols (PCP) from the upper aquifer to Budd Inlet. This has been calculated to be at the level of from 143 to 191 pounds per year of the two substances combined.

XV

On February 13, 1985, DOE sampled both the waters and intertidal sediments of East Bay (Budd Inlet) adjacent to the Cascade site. The sediments revealed 1700 parts per million of PNA. This is the highest

---

1 Appellant has urged in argument that the oil is "on" rather than "in" the groundwater. Since oil generally does not mix with water we find this to be a distinction without a difference.

known reading in Puget Sound for that contaminant. It exceeds readings taken at the Hylebos Waterway in Tacoma, at Eagle Harbor on Bainbridge Island and at Harbor Island in Seattle, each of which have exhibited PNA readings regarded as high. Moreover, the levels of PNA in East Bay sediments near the site are probably sufficient to harm marine life. Those levels are in excess of what has been determined to affect species diversity and mortality in the federal CERCLA investigation of the tideflats area of Tacoma's Commencement Bay. Concentrations in East Bay peak near the Cascade facility and decrease moving both to the northwest and offshore.

Water samples revealed phenol (PCP) at 8.6 parts per billion. The surface water quality standard for PCP (toxic conditions for aquatic biota) is 53 parts per billion (See Findings Of Fact VII, above).

XVI

There are no known, significant sources of creosote or pentachlorophenol in the area either now or in the past, except the Cascade facility. Historically, both Texaco and Olympia Oil & Wood have maintained bulk storage of oil in tanks near the Cascade site. However, these were too far distant to be a plausible source of the oil pool under Cascade's facility. Also, while oil, like creosote, is a source of PNA's, the specific PNAs differ. In oil, methylated PNAs are in greater abundance than straight PNA. The reverse is true for creosote. The PNA contamination in both the groundwater beneath the Cascade site and in the adjacent intertidal sediments of East Bay

reflect a predominance of straight PNAs (e.g. napthalene) over methylated PNAs (e.g. 2-methylnapthalene). The PNA contamination at issue is therefore the probable result of creosote escapement from Cascade's operation into the soil, groundwater and tidal sediments.

XVII

On August 14, 1985, DOE sampled the outfall of a storm sewer which serves downtown Olympia and empties into West Bay near the Cascade site. Although Cascade is not connected to this sewer line, DOE has supposed that PNAs from the soil and groundwater may have infiltrated the sewer line. Readings in samples from the outfall showed the presence of PNAs. However, these PNAs show the predominance of methylated PNAs typical of oil, not creosote. Further, the route between Cascade and the sewer line is complicated by questions of the differential in head between groundwater and the sewer line. It has not been shown, on this record, that PNA contamination in the sewer line or elsewhere in the vicinity of West Bay is attributable to Cascade.

XVIII

Any Conclusion of Law which is deemed a Finding of Fact is hereby adopted as such.

From these Findings of Fact the Board comes to these

CONCLUSIONS OF LAW

I

The authority supporting the regulatory order on appeal is RCW 90.48.120 of the State Water Pollution Control Act. This provides:

> (1) Whenever, in the opinion of the department, any person shall violate or creates a substantial potential to violate the provisions of this chapter, or fails to control the polluting content of waste discharged or to be discharged into any waters of the state, the department shall notify such person of its determination by registered mail. Such determination shall not constitute an order or directive under RCW 90.48.135. Within thirty days from the receipt of notice of such determination, such person shall file with the department a full report stating what steps have been and are being taken to control such waste or pollution or to otherwise comply with the determination of the department. Whereupon the department shall issue such order or directive as it deems appropriate under the circumstances, and shall notify such person therof by registered mail.
> (2) Whenever the department deems immediate action is necessary to accomplish the purposes of chapter 90.48 RCW, it may issue such order or directive, as appropriate under the circumstances, without first issuing a notice or determination pursuant to subsection (1) of this section. An order or directive issued pursuant to this subsection shall be served by registered mail or personally upon any person to whom it is directed. (Emphasis added)

II

One of the provisions of the chapter, and the one which is pertinent here, provides:

> It shall be unlawful for any person to throw, drain, run, or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters according to the determination of the commission, as provided for in this

chapter. RCW 90.48.080.

III

The term pollution is defined within the chapter as follows:

> Whenever the word "pollution" is used in this chapter, it shall be construed to mean such contamination, or other alteration of the physical, chemical or biological properties, of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life. RCW 90.48.020.

IV

Reading together the three provisions quoted above, it must be shown that appellant has 1) discharged 2) matter causing or tending to cause pollution 3) into waters of the state to justify issuance of a regulatory order such as this one. By the reasoning which follows, we conclude that this showing has been made, and that the order should be affirmed.

V

Discharge by Cascade

Appellant urges that DOE has not proven any discharge by it to ground or surface water. We disagree. While it is true that there is no eye-witness account of such a discharge, there is a compelling array of scientific evidence. As to groundwater, the

PNA contaminants are identifiable as constituents of creosote. Creosote has been used by Cascade for many years in its operations, while no significant alternate sources of creosote were shown. The same is true of the phenol and oil contaminants which match the 5% PCP solution in oil used by Cascade exclusively. Readings in both PNAs and phenols (PCP) peak at the Cascade pressure chambers and tanks then diminish therefrom in all directions. The weight of the evidence will support but one conclusion, and that is that Cascade has suffered or permitted a discharge of both its creosote (PNAs) and its PCP solution into the groundwater. Finally, these same contaminants have migrated to the hydraulically connected waters and sediments of East Bay constituting a discharge by Cascade to surface waters.

IV

Causing or Tending to Cause Pollution

The discharge by Cascade of creosote (PNAs) and PCP to the groundwater of the upper aquifer has rendered such waters harmful to any commercial or industrial uses such as may have been feasible prior to contamination. In that sense the discharge of contaminants by Cascade has caused pollution of that groundwater.

The larger offense, however, rests with the migration of contaminants from the groundwater to East Bay. The contaminant PNAs are continuously moving with the groundwater to emerge into and become lodged in the sediment of East Bay where PNAs pose a direct threat to aquatic life. In effect, Cascade's discharge of PNA contaminants to

"groundwater" have thereby rendered that groundwater harmful or detrimental to the aquatic life of East Bay. For that reason, also, the discharge of PNA contaminants by Cascade has caused pollution of that groundwater.

Finally, the migration of PCP from the groundwater is directly into the surface waters of East Bay where it has been found in significant amounts. The discharge of phenol (PCP) contaminants by Cascade is tending to cause pollution of the surface waters of East Bay.

VII

Waters of the State

The term "waters of the state" is defined by RCW 90.48.020 to include all underground and salt waters of the state and includes the groundwater and the waters of East Bay at issue here.

VIII

We conclude that appellant has permitted or suffered the discharge of matter into waters of the state so as to cause or tend to cause pollution of such waters in violation of RCW 90.48.080.

IX

There being a violation by appellant of RCW 90.48.080, an order under RCW 90.48.120 is justified. Appellant first contends, however, that the order now before us should have been issued under RCW 90.48.120(1) allowing the recipient to report what steps have been taken to control pollution. We believe that when issuance of an order

is justified, the choice of whether to proceed under RCW 90.48.120(1) or RCW 90.48.120(2) is a matter committed entirely to DOE's discretion and not directly reviewable by this Board. The propriety of making an Order immediately effective is dealt with by the Board under RCW 90.48.135 in the context of applications for stays.

In any event, were we to address the issue we would conclude that an order under RCW 90.48.120(1) would have been redundant in view of the three years of discussions which preceeded the Order. Action under RCW 90.48.120(2) providing for an immediate order was justified by appellants failure to meet reporting deadlines coupled with the unceasing migration of contaminants from the groundwater to East Bay.

X

The propriety of the action required by a regulatory order issued under RCW 90.48.120 is measured by the statutory term "appropriate under the circumstances". The action required by DOE of appellant, namely reporting and sampling, was appropriate under the circumstances of this case which have included prolonged and unsuccessful efforts to obtain the same information without a formal order.

XI

Appellant further urges that a "Remedial Investigation" and "Feasibility Study" are not appropriate under the authority of the state's Water Pollution Control Act, chapter 90.48 RCW. It urges that these terms have specific legal meaning under the federal law (CERCLA,

42USC Sec. 9601, et seq.). While this meaning under federal law is undisputed, we see nothing in either federal or state law which bars the state from pursuing a similar pattern of investigation or study where, as here, that would be "appropriate in the circumstances" as set forth in RCW 90.48.120. The nature of the information which DOE seeks under these federal sobriquets has been agreed by the parties and partially completed. All such information is germane to halting or controlling water pollution, and is within the ambit of the Act, chapter 90.48 RCW.

XII

The order before us is not barred by the statute of limitations, RCW 4.16.100(2) requiring action upon a statute for a "forfeiture or penalty to the state". This is so for two reasons. First, the regulatory order at issue is not an order of forfeiture or penalty to the state. Compare U.S. Oil v. Department of Ecology 96 Wn.2d 85(1981) involving an order of civil penalty. Second, the evidence of widespread soil contamination at the Cascade site is sufficient to support a conclusion that Cascade's contaminants which have escaped to the soil are leaching continuously to groundwater and thereafter, as we have found, contaminants migrate to East Bay. This constitutes a continuing discharge of contaminants and not one which has abruptly ended (as might an oil spill to surface water) so as to commence the running of the 2 year statute of limitations. Compare U.S. Oil v. Department of Ecology, Supra, involving discharges in excess of a

permitted level on 6 discrete days of a given year. The "discovery" of a ground water contamination problem at Cascade in 1983, cited in the order now before us, is thus not the discovery of a past discharge as in U.S. Oil but the discovery of a continuing discharge occuring even now. Put another way, even were the statute of limitations applicable to this regulatory order, the most recent two years of the ongoing discharge would support the order and would not be beyond the two year period of limitation.

XIII

We have carefully reviewed the other contentions of appellant and find them to be without merit.

XIV

In summary, appellant has violated RCW 90.48.080 proscribing water pollution, the order of the Department of Ecology is appropriate, and that order should be affirmed.

XV

Any Finding of Fact which is deemed a Conclusion of Law is hereby adopted as such.

ORDER

The regulatory order (DE 86-520) issued by Department of Ecology to Cascade Pole Company is affirmed.

DONE at Lacey, Washington this 17th day of July, 1987.

POLLUTION CONTROL HEARINGS BOARD

7/20/87

LAWRENCE J. FAULK, Chairman

WICK DUFFORD, Member

WILLIAM A. HARRISON
Administrative Appeals Judge